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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/012,459	12/12/2001	Yong Hyun An	K-0355	7276

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CHANTILLY, VA 20153

EXAMINER
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SAMS, MATTHEW C

ART UNIT	PAPER NUMBER
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2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/09/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/012,459	<b>Applicant(s)</b> AN ET AL.	
	<b>Examiner</b> Matthew C. Sams	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6,9-15,19-22,35-37 and 39-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,9-15,19-22,35-37 and 39-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/22/2006 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 4-6, 9-15, 19-22, 35-37, 39-45 and 47-50 are rejected under 35 U.S.C. 102(e) as being anticipated by Shteyn et al. (US-6,782,253 hereinafter, Shteyn).

Regarding claim 1, Shteyn teaches an information service system comprising:

a database server (Fig. 4 [410]) that receives and stores information on a plurality of different shops within a building; (Col. 8 lines 12-41)

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a data transmission server at a prescribed location that communicates with a customer's mobile terminal and automatically radio-transmits a first type of information including the information on the shops to the customer's mobile terminal when the customer enters the building; (Col. 4 lines 18-23 and Col. 7 lines 42-45)

an operation server that controls the database server and the data transmission server; (Fig. 4 [420]) and

a sudden information data transmission device (Fig. 4 [402, 404, 406 & 408]) provided for the shops, wherein the sudden information data transmission device is coupled to control terminals (Fig. 4 [412, 414, 416 & 418]) in the shops, is installed within a predetermined area different from the prescribed location of the data transmission server (Col. 8 lines 12-41), and radio-transmits a second type of information including sudden event information to the customer's mobile terminal when a sudden event is generated by one of the shops (Col. 6 lines 17-26), the sudden event information transmitted while the customer is within a range of said sudden information data transmission device (Col. 3 lines 1-6, 36-51 and Col. 6 lines 17-26) where reception by the mobile terminal is possible, wherein the first type of information is transmitted at different times and through different wireless transmission links than the second type of information. (Col. 6 lines 17-26 *i.e.* second type, Col. 7 lines 42-45 *i.e.* first type and Col. 8 lines 12-41)

Regarding claim 2, Shteyn teaches a radio data transmitter/receiver is installed in the data transmission server (Col. 4 lines 18-23 and Col. 7 lines 42-45) and the

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customer's mobile terminal (Col. 3 lines 39-41), respectively, for a mutual radio data transmission/reception. (Col. 3 lines 1-51)

Regarding claim 4, Shteyn teaches the sudden information data transmission device communicates by a short-distance radio transmission. (Col. 3 lines 1-51 and Col. 8 lines 12-41)

Regarding claim 5, Shteyn teaches a radio data transmitter/receiver is installed in the sudden information data transmission device to support the radio transmission. (Col. 8 lines 12-41)

Regarding claim 6, Shteyn teaches the prescribed location is within the building. (Col. 6 lines 17-26 & Col. 7 lines 33-54)

Regarding claim 9, Shteyn teaches the data transmission server communicates directly with the customer's mobile terminal. (Col. 4 lines 18-23 and Col. 7 lines 38-45)

Regarding claim 10, Shteyn teaches the data transmission server communicates indirectly with the customer's mobile terminal. (Col. 3 lines 17-35, Col. 7 lines 38-50 and Col. 8 line 42 through Col. 9 line 24)

Regarding claim 11, Shteyn teaches the data transmission server communicates with the customer's mobile terminal through a third-party wireless communication gateway. (Col. 3 lines 17-51 and Col. 8 line 42 through Col. 9 line 24)

Regarding claim 12, Shteyn teaches a method of operating an information service system, comprising:

determining whether a potential customer enters a building that includes a plurality of shops; (Col. 7 lines 38-45)

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obtaining general information about a product of a vendor corresponding to one of the shops from a database server; (Col. 7 lines 42-45)

automatically transmitting the general information between a data transmission server and a customer's mobile terminal when the potential customer enters the building; (Col. 4 lines 18-23 and Col. 7 lines 42-45)

receiving sudden event information from a network of a specified vendor, if a sudden event is generated by the specified vendor; (Col. 6 lines 17-26 & Col. 8 lines 12-41) and

registering the received event information in the database server (Fig. 4 [410]) and radio transmitting the sudden event information from a sudden information data transmission device to the customer's mobile terminal (Col. 8 lines 26-39), the sudden information data transmission device (Fig. 4 [402-408]) coupled to a control terminal in the vendor's shop (Fig. 4 [412-418]) and being located in an area different from the data transmission server (Col. 7 lines 42-54), the sudden event information transmitted when the customer is located within a range of said sudden information data transmission device where reception by the mobile terminal is possible (Col. 3 lines 1-6, 36-51 and Col. 6 lines 17-26), wherein the sudden event information is transmitted at different times and through different wireless links than the general information. (Col. 6 lines 17-26 *i.e.* second type, Col. 7 lines 42-45 *i.e.* first type and Col. 8 lines 12-41)

Regarding claim 13, Shteyn teaches the data transmission server transmits the general information to the mobile terminal by a wired or a radio medium. (Col. 4 lines 18-23 and Col. 7 lines 38-45)

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Regarding claim 14, Shteyn teaches receiving customer information, regarding the mobile terminal, with the data transmission server while transmitting the general information to the mobile terminal. (Col. 7 lines 33-54)

Regarding claim 15, Shteyn teaches the customer information comprises at least one of a phone number of the mobile terminal and an Internet Protocol (IP) used by the mobile terminal. (Col. 2 lines 42-44 and Col. 10 lines 61-67)

Regarding claim 19, the limitations of claim 19 are rejected as being the same reason set forth above in claim 9.

Regarding claim 20, the limitations of claim 20 are rejected as being the same reason set forth above in claim 10.

Regarding claim 21, the limitations of claim 21 are rejected as being the same reason set forth above in claim 11.

Regarding claim 22, Shteyn teaches a method of operating an information service system comprising:

confirming entry of a customer into a building containing a plurality of shops;  
(Col. 7 lines 38-45)

automatically obtaining information from a mobile terminal of the customer regarding the mobile terminal when the customer enters the building, and registering the obtained information in a database server; (Col. 7 lines 42-54)

awaiting a sudden event from a vendor in the building; (Col. 3 lines 56-62 and Col. 6 lines 17-26) and

obtaining sudden event information and transmitting the obtained sudden event information to the customer's mobile terminal (Col. 6 lines 17-26 and Col. 8 lines 12-41), in the building, when the sudden event arrives from the vendor, wherein the sudden event information is radio-transmitted to the customer's mobile terminal, located within a range where reception by the mobile terminal is possible (Col. 3 lines 1-6, 36-51 and Col. 6 lines 17-26), by controlling a respective sudden information data transmission section installed within the building, wherein the sudden event information is transmitted to indicate a sudden sale occurring in the building (Col. 6 lines 17-22), and wherein the sudden event information is transmitted over different wireless links than planned event or basic information are transmitted to the customer's mobile terminal. (Col. 6 lines 17-26 *i.e.* second type, Col. 7 lines 42-45 *i.e.* first type and Col. 8 lines 12-41)

Regarding claims 35-37, Shteyn teaches the sudden event information includes a short-term discount selling or issuance of discount tickets. (Col. 6 lines 17-22)

Regarding claim 39, Shteyn teaches the data transmission server is located at an entrance into the building. (Col. 4 lines 17-22 & Col. 7 lines 38-45)

Regarding claim 40, Shteyn teaches the database server (Fig. 4 [410]) receives a selection signal from a store manager indicating a type of said stored information. (Col. 8 lines 12-58)

Regarding claim 41, Shteyn teaches the stored information is basic information or event information of the store. (Col. 7 lines 42-45 and Col. 8 lines 12-58)

Regarding claim 42, Shteyn teaches the first and second types of information are transmitted through different wireless links which conform to a same short-range



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communication protocol. (Col. 6 lines 17-26 *i.e.* second type, Col. 7 lines 38-45 *i.e.* first type and Col. 8 line 54 through Col. 9 line 24)

Regarding claim 43, Shteyn teaches the mobile terminal includes a wireless communications port for receiving the first and second types of information through the different links and an antenna for receiving calls from a mobile communication network. (Col. 3 lines 17-20, 36-51 and Col. 8 line 51 through Col. 9 line 24)

Regarding claim 44, Shteyn teaches the short-range communication protocol is a Bluetooth protocol or an infrared protocol. (Col. 3 lines 36-51)

Regarding claim 45, Shteyn teaches the operation server (Fig. 4 [420]) confirms a location of the customer's mobile terminal through manipulation of the data transmission server by the customer. (Col. 4 lines 17-22, Col. 7 lines 38-45 and Col. 9 lines 12-24)

Regarding claim 47, Shteyn teaches the data transmission server automatically radio-transmits the first type of information in response to a customer request for the first type of information. (Col. 4 line 17-22 & Col. 7 lines 33-54)

Regarding claim 48, Shteyn teaches the customer request is made based on the customer's manipulation of the mobile terminal or the data transmission server. (Col. 7 lines 33-54 *i.e.* explicitly select a profile)

Regarding claim 49, Shteyn teaches the request is generated based on customer manipulation of the mobile terminal of the customer or a data transmission server in the building. (Col. 7 lines 33-54 *i.e.* explicitly select a profile)

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Regarding claim 50, Shteyn teaches the sudden information includes a sudden promotional or sale event beginning in one of the shops, and wherein transmission of the sudden information is initiated after a confirmation has been performed indicating that the customer has entered and is still located in the building. (Col. 3 lines 56-62 & Col. 6 lines 17-26)

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shteyn in view of Johnson (US-6,456,234).

Regarding claim 46, Shteyn teaches the limitations of claim 1 above, wherein the mobile terminal is a mobile phone (Col. 7 lines 38-42) and the network cell can give a guide of the beacons located within a local geographic area of the mobile phone (Col. 7 lines 38-42) in order to receive the sudden information regarding sales (Col. 4 lines 18-23 & Col. 6 lines 17-26), but differs from the claimed invention by not explicitly reciting that the operation server continuously receives information derived from reception by a mobile communication network of a pilot signal from the mobile phone to confirm a location of the customer within the building.

In an analogous art, Johnson teaches triangulating the location of a mobile terminal in order to confirm the location of a customer within a building. (Fig. 5A and Col. 11 line 49 through Col. 12 line 11) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the system of Shteyn after modifying it to incorporate the triangulation of Johnson. One of ordinary skill in the art would have been motivated to do this since triangulating a transmitting signal is a common method in the art to determine the location of a mobile terminal because GPS circuitry is not accurate within buildings without requiring additional equipment to retransmit the satellite signals.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-50 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Sams whose telephone number is (571)272-8099. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571)272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MCS  
2/2/2007

  
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SUPERVISORY PRIMARY EXAMINER